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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,911	08/22/2003	Yuzo Higashiyama	P/1071-1600	1595
2352	7590 07/26/2005	EXAMINER		
	K FABER GERB & SOI E OF THE AMERICAS	EDMONDSON, LYNNE RENEE		
NEW YORK,			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)				
Office Action Summary  The MAILING DATE of this communication app		10/646,911		HIGASHIYAMA, Y	′UZO			
		Examiner	1	Art Unit	•			
		Lynne Edmondson	I .	1725	Idrana			
Period for Reply	ig date of this communication app	ears on the cover s	neet with the co	rrespondence ad	iaress ~			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
2a)⊠ This action i 3)⊡ Since this a	Responsive to communication(s) filed on <u>5/16/05</u> .  This action is <b>FINAL</b> .  2b) This action is non-final.  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4a) Of the ab 5)	4) ☐ Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1,3-6 and 8 is/are rejected.  7) ☐ Claim(s) 2,7 and 9-11 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.							
Application Papers								
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 25 August 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S	.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment(s)								
	n's Patent Drawing Review (PTO-948) e Statement(s) (PTO-1449 or PTO/SB/08)	5) <u> </u>	erview Summary (I per No(s)/Mail Dat tice of Informal Pa her:		D-152)			

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Nomura et al. (USPN 6357506 B1).

Nomura teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp (13a, 22a) vibrates synchronously with the vibration member and pressing the material against the bonding surface (figures 2 and 7 and col 4 line 28 – col 5 line 42).

3. Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Akiyama et al. (USPN 6273980 B1).

Akiyama teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp vibrates synchronously with the vibration member and

pressing the material against the bonding surface (col 3 lines 33-60 and col 3 lines 20-32).

4. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Gratz et al. (USPN 6517652 B1).

Gratz teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp vibrates synchronously with the vibration member and pressing the material against the bonding surface (col 6 line 15 – col 7 line 5).

## Response to Arguments

- 5. Regarding applicant's argument that Akiyama does not teach clamping in the direction of ultrasonic vibration see figures 1 and 2 which show (with dashed lines) a seating area for the lenses which holds them on all sides, which includes horizontally, by seating them at least partially within the holders (col 1 lines 31-47, col 2 lines 1-12 and col 3 lines 5-54). Figure 1 shows horizontal vibration.
- 6. Therefore the 102 rejection of claims 1, 6 and 8 as anticipated by Akiyama stands.
- 7. Regarding applicant's argument that Gratz does not teach vibration and clamping in the same direction, see col 2 lines 32-38 and col 4 lines 1-15, which teach that the clamp presses against the workpiece in a horizontal direction and does not teach the optional transverse vibrational motion.
- 8. Therefore the 102 rejection of claims 1, 5 and 6 as anticipated by Gratz stands.

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9. Regarding applicant's argument that Nomura does not teach clamping in the direction of ultrasonic vibration, it is noted that the clamp surrounds the pipe and that vibration is applied to the outside of the pipe.

10. Therefore the 102 rejection of claims 1 and 3-5 as anticipated by Nomura stands.

## Allowable Subject Matter

- 11. Claims 2, 7 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 12. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art teaches the invention essentially as claimed but does not teach urging the clamp at a node or does not use a predetermined, controlled load or position control (Akiyama, USPN 6273980 B1). Neither is the particular horn shape disclosed.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ogino et al. (USPN 5651494), Belcher et al. (USPN 5460320, side and vertical holding) and Higashiyama (US 2003/0160084 A1).

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14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson Primary Examiner

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**LRE**